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FISCAL IMPACT STATEMENT

LS 6573

BILL NUMBER: HB 1063

NOTE PREPARED: Jan 28, 2010

BILL AMENDED: Jan 21, 2010

SUBJECT: Energy Efficient Buildings.

FIRST AUTHOR: Rep. Pierce

FIRST SPONSOR: Sen. Gard

BILL STATUS: As Passed House

FUNDS AFFECTED: ☒ **GENERAL**
DEDICATED
FEDERAL

IMPACT: State & Local

Summary of Legislation: This bill requires certain government buildings to be designed and constructed to achieve or exceed the performance criteria determined under certain rating systems. It specifies that the Environmental Protection Agency's Energy Star rating system is an optional standard permissible only for the renovation or reconstruction of a government building. It provides that Indiana hardwood lumber may be considered for use as a local source material in any project in which the use of Indiana hardwood lumber is practicable. It also recognizes a 2006 timberland study.

Effective Date: July 1, 2010.

Explanation of State Expenditures: *Summary* - Under this bill, a project approved after June 30, 2010, for the construction or renovation of a government building or structure that would cost at least \$500,000 and consist of at least 5,000 square feet of floor space must be designed to achieve or exceed the performance criteria determined under the LEED silver rating, the Green Globes Two Globes rating, the Environmental Protection Agency Energy Star rating, or an equivalent standard that is accredited by the American National Standards Institute. The bill also states that, wherever practical, Indiana hardwood lumber may be used in the renovation or construction of the government building.

The long-term impact is whether any potential savings in operating costs (such as heating, water, and electricity) because one of the energy-efficient standards were employed would be enough to offset any initial increase in construction or renovation costs. The potential long-term savings are indeterminable at this time. The IDOA estimates that the added cost to meet energy efficiency standards can vary from 1% to 2% for new construction of larger buildings, and 5% to 7% for new construction of smaller buildings. The cost may be more for repairs and renovations. One study comparing the costs of building LEED projects with the

costs for non-LEED projects found that incorporating sustainable design elements can be accomplished within a project's initial budget, or with little supplemental funding. Any additional costs and operating cost savings associated with utilizing energy efficiency techniques in construction and renovation will vary depending on the project and the resources available.

As a result of Executive Order 08-14, the Indiana Department of Administration (IDOA) works toward maximum energy efficiency in all projects for new construction and repairs and renovation.

Additional Details and Background Information - Bill Requirements: This bill provides that newly constructed government buildings must be designed and constructed to achieve or exceed the performance criteria determined under any of the following:

- (1) LEED Silver Rating;
- (2) Green Building Initiative's Two Globes Rating; or
- (3) any equivalent rating accredited by the American National Standards Institute.

Additionally, energy efficiency standards for renovated or reconstructed buildings may include the Environmental Protection Agency's Energy Star rating, as well as the rating systems above used for newly constructed buildings. Projects that cost less than \$500,000, as well as buildings or structures that are either listed or eligible to be listed on the National Register of Historic Places are exempted from meeting the energy efficiency requirement of this bill.

State Buildings Meeting Energy Efficient Standards: Five state buildings have received LEED certification, including three buildings at Madison State Hospital (Southeast Regional Treatment Center), the Isaac Ray Treatment Center at Logansport State Hospital (received silver certification), and the Indiana Forensic & Health Sciences Laboratories.

LEED Rating System: According to the U.S. Green Building Council's website, the LEED rating system was created to provide the building industry with consistent, credible standards for what constitutes a green building. The rating is determined by earning points in a number of categories, including sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, and innovation in design. Projects are awarded Certified, Silver, Gold, or Platinum certification depending on the number of benchmarks met. LEED informational material available on the website indicates that an initial investment of 2% in green building design, on average, will result in life cycle savings of 20% of the total construction costs.

Green Building Initiative's Rating System: To achieve the Green Building Initiatives Two Globes rating, a building must be assessed by an independent third party that is affiliated with the Green Building Initiative. Out of 1,000 points possible, the building must achieve 550-690 (55%-69%) of the points to be recognized with two green globes. The most globes a building can receive is four. Areas evaluated include energy, indoor environment, emissions, resources, environmental management, and water.

Energy Star Rating: The Energy Star is awarded to buildings that achieve a rating of 75 or higher using an Internet tool provided by the Environmental Protection Agency's Energy Star website. Areas evaluated include energy and water consumption and energy performance. After the required rating is achieved, the next step is a verification process.

Energy Efficiency Executive Order: Executive Order 08-14 has the following provisions:

All new state buildings shall be designed, constructed, operated, and maintained to achieve maximum energy efficiency to the extent this can be accomplished on a cost-effective basis, considering construction and operating costs over the life cycle of the building.

The DOA shall use the goal of achieving energy efficiency for the design of all buildings that require a cost-effectiveness analysis, and design repairs and renovations of existing buildings to achieve the maximum energy efficiency on a cost-effective basis.

Efficiency may be demonstrated by achieving the silver rating under the LEED rating system; the two globes rating under the Green Globes rating system; the Environmental Protection Agency's ENERGY STAR®; or an equivalent under a rating system that is accredited by the American National Standards Institute.

Historic aesthetic and local-sourced materials shall be afforded value in the cost analysis for repairs and renovations, and Indiana hardwood lumber should be considered for all projects where practicable as a local source material.

Explanation of State Revenues:

Explanation of Local Expenditures: See *Explanation of State Expenditures*

Explanation of Local Revenues:

State Agencies Affected: IDOA; All.

Local Agencies Affected: All.

Information Sources: Tom Coulter, IDOA, 317-232-3001; U.S. Green Building Council, <http://www.usgbc.org/>; The Green Building Initiative, <http://www.thegbi.org/home.asp>; Environmental Protection Agency's Energy Star Website, <http://www.energystar.gov/>; American Society of Heating, Refrigerating, and Air Conditioning Engineers, <http://www.ashrae.org/>; Kats, Gregory H., Leon Alevantis, Adam Berman, Evan Mills, Jeff Perlman, "The Costs and Financial Benefits of Green Buildings: A Report to California's Sustainable Building Task Force", October, 2003; U.S. Green Building Council, Chicago Chapter, *Regional Green Building Case Study Project: A Post-Occupancy Study of LEED Projects in Illinois*, Fall 2009; Davis Langdon, "Cost of Green Revisited: Reexamining the Feasibility and Cost Impact of Sustainable Design in the Light of Increased Market Adoption." July 2007 1-25; Syphers, Geof, et al. "Managing the Cost of Green Building," KEMA, 2003.

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